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A new species of the genus *Mendoza* (Araneae: Salticidae) from the Southwest Islands of Japan

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Abstract — A new spider species, *Mendoza ryukyuensis* sp. nov. (Salticidae) is described from the Southwest Islands of Japan (Amami-oshima Island and Nakanoshima Island). Female of *M. ryukyuensis* resembles those of the other species of the same genus in appearance, but can be distinguished from them by genital structure. In contrast, male is easily distinguishable from those of other related species in both appearance and genital shape.

Key words — jumping spider, *Mendoza*, Ryukyu Islands, new species

Introduction

The salticid spider genus *Mendoza* Peckham & Peckham 1894 (Araneae: Salticidae) comprises a total of 11 species (Prószyński 2006), most of which are distributed in the Palearctic region including North Africa, Russia, China, Korea and Japan (Platnick 2006). Here I describe a new species of this genus from the Oriental region using the specimens from the Southwest Islands of Japan. The holotype and paratypes are deposited in the collection of the National Science Museum (Natural History), Tokyo.

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Mendoza ryukyuensis sp. nov.
[Japanese name: Minami-yahazuhaetori]
(Figs. 1–11)

Type series. Holotype: ♂, Yamato-son, Amami-oshima Is., Kagoshima Pref., Japan, 9-VII-2005, Y. G. Baba leg. (NSMT-Ar 5961).

Paratypes: 1♂1♀, Nanatsuyama, Nakanoshima Is., Toshima-mura, Kagoshima Pref., 3-X-1999, Y. G. Baba leg. (NSMT-Ar 5962, NSMT-Ar 5963). 2♀, Yuwan, Uken-son, Amami-oshima Is., Kagoshima Pref., Japan, 18-VIII-1996, A. Tanikawa leg. (NSMT-Ar 5964, NSMT-Ar 5965). 1♀, Sokari, Setouchi-cho, Amami-oshima Is., Kagoshima Pref., 16-VI-2004, Y. G. Baba leg (NSMT-Ar 5966). 1♀, same data as the holotype (NSMT-Ar 5967).

Other specimens examined. 1♂, Nanatsuyama, Nakanoshima Is., Toshima-mura, Kagoshima Pref., 2-X-1999, Y. G. Baba leg. 1♂1♀, same data as the holotype.

Description. Based on the male holotype and one of the female paratypes (NSMT-Ar 5965). Measurements (♂/♀, in mm). Body length 11.57/12.67. Carapace length 3.84/3.88, width 2.92/2.80. Abdomen length 6.75/8.17, width 2.00/2.96.

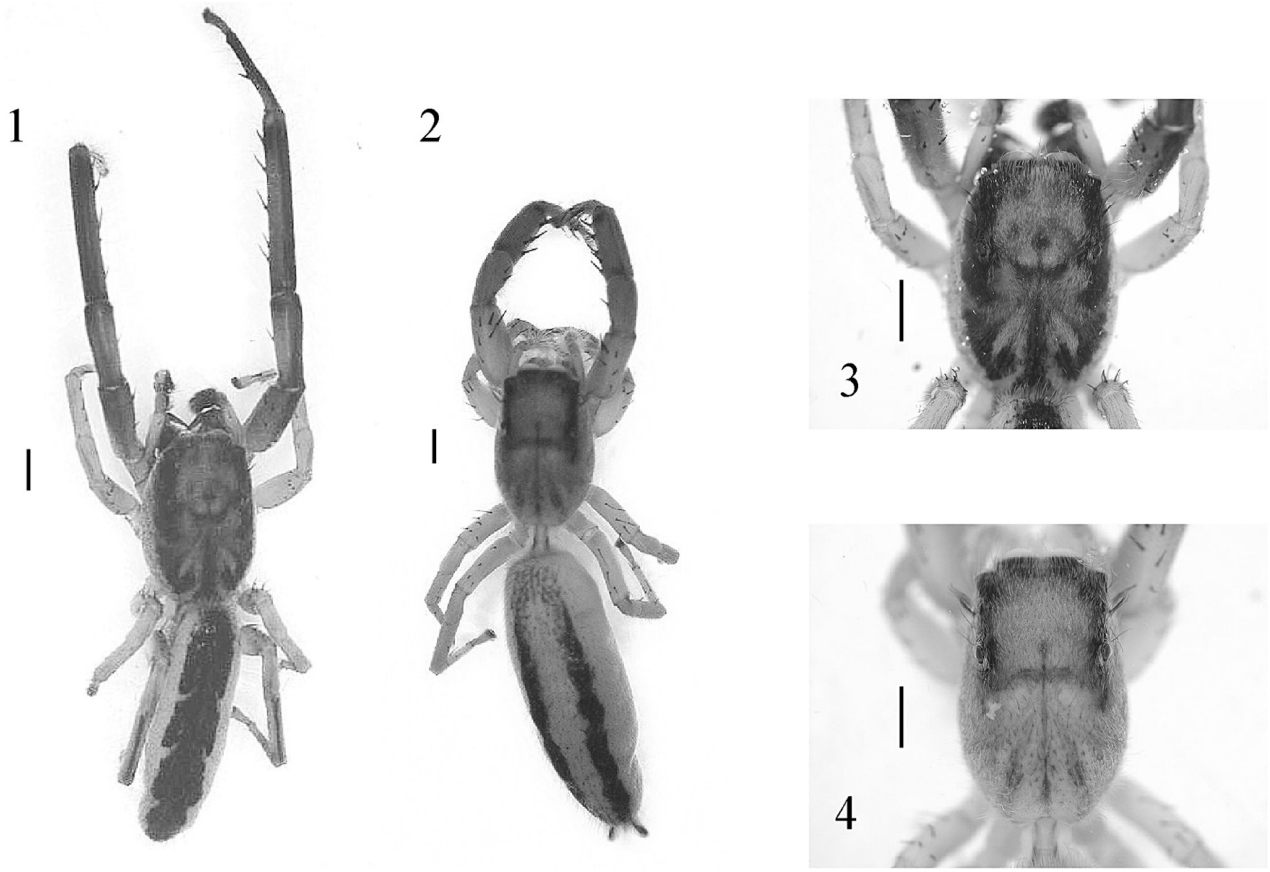
Eye fields (The following abbreviations are used: ALE, anterior lateral eye; AME, anterior median eye; PLE, posterior lateral eye; PME, posterior median eye. The distances between eyes are expressed as following. e.g. ALE-AME.). ALE-ALE 2.06/1.97, PLE-PLE 2.11/2.06, ALE-PLE 1.46/1.37, ALE-PME 0.74/0.69. ALE-PLE/carapace length 0.38/0.35, ALE-ALE/PLE-PLE 0.97/0.96. AME diameter 0.69/0.57. ALE/AME 0.42/0.45, ALE/PLE 1.25/1.13, PME/PLE 0.25/0.25.

Measurements of legs as shown in Table 1.

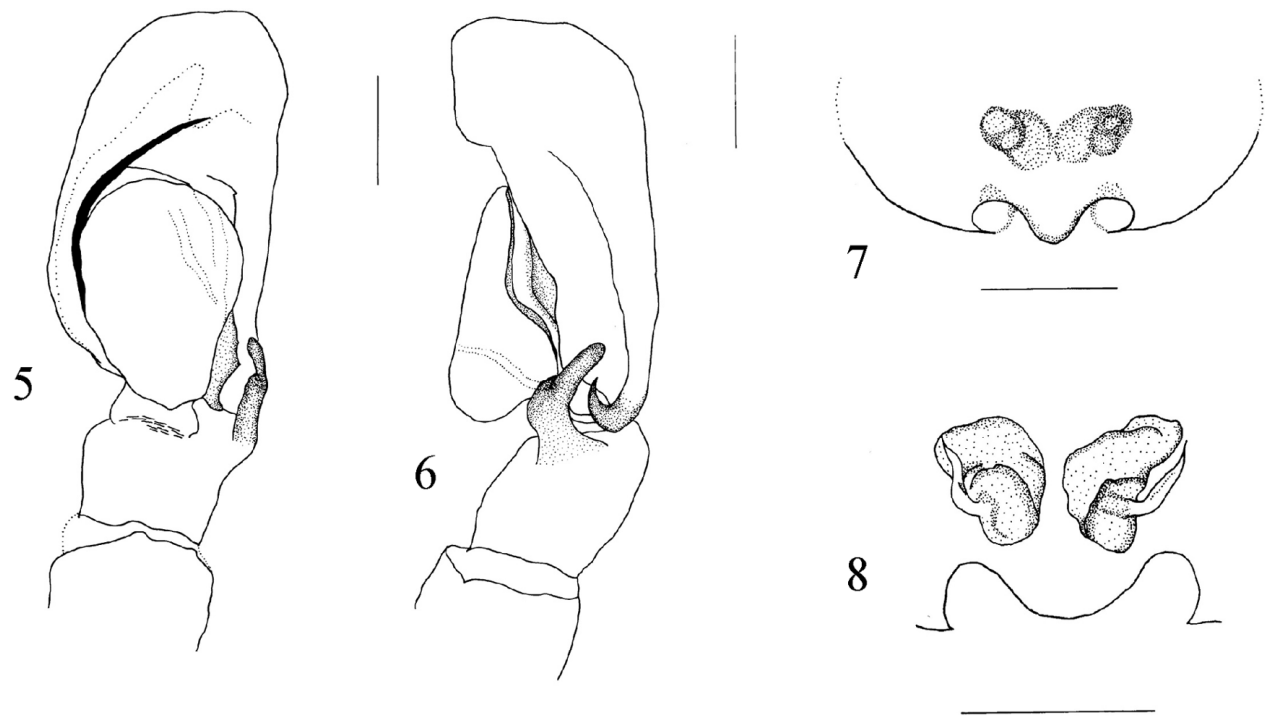
Male Palp. Tibial apophysis long (Figs. 5–6). Basal end of retrolateral side of cymbium curved as fishhook (Fig. 6). Dorsal side of cymbium partly covered with white hairs in a row.

Table 1. Measurements of leg segments of *Mendoza ryukyuensis* [male holotype/female paratype (NSMT-Ar 5965); in mm].

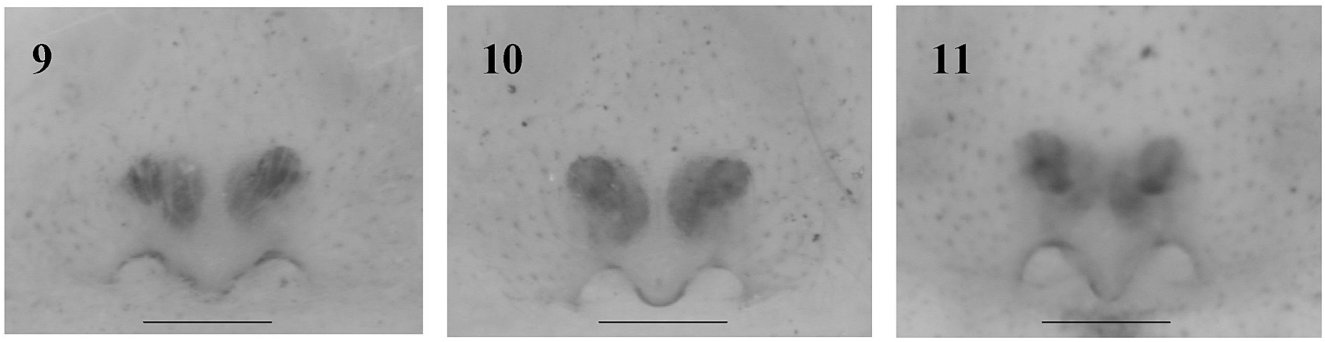
Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	3.58/2.42	2.08/1.30	3.92/2.25	2.83/1.50	1.08/0.75	13.49/8.22
II	2.08/1.67	1.25/1.08	1.75/1.25	1.33/0.92	0.67/0.58	7.08/5.50
III	1.91/1.75	1.00/0.91	1.17/1.08	1.33/1.08	0.67/0.50	6.08/5.32
IV	2.42/2.08	1.17/1.00	2.17/1.83	1.83/1.50	0.67/1.00	8.26/7.41



Figs. 1–4. *Mendoza ryukyuensis*. 1, Male, dorsal view; 2, female, dorsal view; 3, male carapace; 4, female carapace. (Scales: 1 mm)



Figs. 5–8. *Mendoza ryukyuensis*. 5, Male palp, ventral view; 6, same, retrolateral view; 7, epigynum; 8, female genitalia, dorsal view. (Scales: 0.25 mm)



Figs. 9–11. Variation in the shape of epigynum: 9, from Yuwan, Amami-oshima Is. (NSMT-Ar 5965); 10, from Nanatsuyama, Nakanoshima Is. (NSMT-Ar 5963); 11, from Sokari, Amami-oshima Is. (NSMT-Ar 5966). (Scales: 0.25 mm)

Female genitalia. The margin of epigynal opening loosely curved (Fig. 7), seminal ducts short (Fig. 8).

Coloration and markings. Male. Carapace black, covered with white hairs (Fig. 3); eyes surrounded by red-tinged hairs. Leg I: tarsus and patella black, femur brown; legs II–IV: light brown. Abdomen gunmetal gray, edged with white hairs (Fig. 1).

Female. Carapace light brown, covered with white hairs; anterior half marginated with black (Fig. 4). Leg I brown, the other legs light brown. Abdomen covered with white hairs except for characteristic black bands (Fig. 2).

Variation. Body length: ♂9.24–11.57 mm, ♀9.68–13.01 mm. Carapace length: ♂3.48–3.84 mm, ♀3.24–3.88 mm. Carapace width: ♂2.52–2.92 mm, ♀2.40–2.92 mm.

Eye fields. ALE-ALE: ♂1.86–2.06 mm, ♀1.69–1.97 mm. PLE-PLE: ♂1.89–2.11 mm, ♀1.74–2.09 mm. ALE-PLE: ♂1.31–1.46 mm, ♀1.23–1.40 mm. ALE-PME: ♂0.63–0.74 mm, ♀0.60–0.69 mm. ALE-PLE/carapace length: ♂0.36–0.38, ♀0.35–0.38. ALE-ALE/PLE-PLE: ♂0.97–0.99, ♀0.93–0.97. AME diameter: ♂0.54–0.69 mm, ♀0.51–0.60 mm. ALE/AME: ♂0.42–0.50, ♀0.43–0.48. ALE/PLE: ♂1.00–1.25, ♀1.00–1.25. PME/PLE: ♂0.22–0.25, ♀0.25.

Epigynum. The margin of epigynal opening has a morphological variation shown in Figs. 9–11.

Remarks. Female of the present new species closely resembles those of both *Mendoza elongata* (Karsch, 1879) and *M. canestrini* (Ninni, in Canestrini & Pavesi, 1868) in appearance, but differs in markings of carapace. The genital structure is clearly distinct from those of other species. Male can be easily distinguished by both coloration and markings. Also, the first legs are relatively long and shape of the tibial apophysis of palp is unique (Figs. 5–6).

Distribution. Japan (Amami-oshima Is., and Nakanoshima Is.)

Etymology. The specific name is derived from the native area of the species.

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